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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/517,673 | 07/11/2005 | Matthias Muth | DE02 0143 US | 1887 |

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| NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131 | | |

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| EXAMINER | |
| RAHMAN, FAHMIDA | |

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| ART UNIT | PAPER NUMBER |
| 2116 | |

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| NOTIFICATION DATE | DELIVERY MODE |
| 01/02/2008 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/517,673

Applicant(s)

MUTH, MATTHIAS

Examiner

Fahmida Rahman

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This final action is in response to communications filed on 10/1/2007.
2. Claims 1-21 have been canceled and claims 22-27 have been added. Thus, claims 22-27 are pending.

Information Disclosure Statement

The information disclosure statement filed on 12/07/2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The document ID 4226704 mentioned on IDS but is not in the record. Therefore, the IDS has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinrich et al (US Patent 6470393), in view of Hanf et al (US Patent 5892893).

For claim 22, Heinrich et al teach the following limitations:

A method of activating an application controller unit (MC in Fig 2) that is coupled to a Controller Area Network bus (lines 10-15 of column 5) and that carries out an application (microcontroller carries out application), comprising:

- a transceiver unit (IF in Fig 2 is a transceiver unit as it can transmit or receive the information; lines 10-12 of column 1) receiving an incoming message occurring on the data bus ("activating address" mentioned in lines 61-62 of column 2);
- and the transceiver unit causing a protocol controller unit (address filter "AF" and "ASR" shown in Figure 3) coupled to the application controller unit to be supplied with voltage first, before the application controller unit is supplied with voltage (lines 45-65 of column 2 mention that activating demand on bus causes activating address filtering. Thus, address filter is supplied with voltage first. When intended address is received, the microcontroller is supplied with the voltage);
- wherein the protocol controller unit is provided with a crystal oscillator input signal (lines 36-67 of column 10 mention that a quartz oscillator is provided in the system for synchronization. The clock master with quartz oscillator reacts emission of a predetermined clock definition bit sequence. Fig 3 shows that ASR receives bit sequences Rx. Thus, quartz oscillator input is provided to the protocol controller).

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Heinrich does not teach that the transceiver and protocol controller are provided on different integrated circuits.

Hanf et al teach a system where transceiver (100 in Fig 1) and protocol controller (22 in Fig 1) are provided on different integrated circuit.

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Heinrich and Hanf. One ordinary skill would be motivated to put the transceiver unit in different integrated circuit, as that would lead to a more flexible and modular design. Any commercially available transceiver chip may be used with the existing system.

For claim 23, address filter stores the reference message and compared with the incoming message stored in ASR that is provided by transceiver unit. If they are same transceiver releases a connection for microcontroller (lines 20-60 of column 5).

For claim 24, note lines 60-65 of column 2.

For claim 25, Heinrich et al teach the following limitations:

A system comprising for use with a Controller Area Network data bus (Fig 1; lines 10-15 of column 5), the system comprising:

- an integrated circuit comprising a transceiver unit coupled to the data bus (IF in Fig 2 is a transceiver unit as it can transmit or receive the information; lines 10-12 of column 1);
- and a protocol controller unit (address filter "AF" and "ASR" shown in Figure 3) having a crystal oscillator input signal (lines 36-67 of column 10 mention that a quartz oscillator is provided in the system for synchronization. The clock master with quartz oscillator reacts emission of a predetermined clock definition bit sequence. Fig 3 shows that ASR receives bit sequences Rx. Thus, quartz oscillator input is provided to the protocol controller) and coupled to the transceiver unit; and
- an application controller unit coupled the protocol controller unit (MC in Fig 2) and coupled to the transceiver unit (Fig 2);
- wherein the transceiver unit causes the protocol controller unit to be supplied with voltage first, before the application controller unit is supplied with voltage (lines 45-65 of column 2 mention that activating demand on bus causes activating address filtering. Thus, address filter is supplied with voltage first. When intended address is received, the microcontroller is supplied with the voltage).

Heinrich does not teach that the transceiver and protocol controller are provided on different integrated circuits.

Hanf et al teach a system where transceiver (100 in Fig 1) and protocol controller (22 in Fig 1) are provided on different integrated circuit.

It would have been obvious for one ordinary skill in the art at the time the invention was made to combine the teachings of Heinrich and Hanf. One ordinary skill would be motivated to put the transceiver unit in different integrated circuit, as that would lead to a more flexible and modular design. Any commercially available transceiver chip may be used with the existing system.

For claim 26, Heinrich teaches that node can be maintained in low power mode when no data is transmitted via the bus line and interfaces are set to active state when activating demand is transmitted via the bus. Fig 2 shows that IF takes power from line 15. Thus, when activating demand is in bus, protocol controller (i.e., part of interface) gets power from 15 to set into active state. Therefore, IF must comprise a first voltage controller that would determine when to supply the additional voltage for address filter (or, protocol controller). Hanf shows that the voltage regulator 110 is within integrated circuit.

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Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinrich et al, in view of Hanf et al (US Patent 5892893), further in view of Hanf et al (US Patent 6438462).

For claim 27, UR in Heinrich is the voltage regulator to the application controller in the event of a match between an incoming message and a reference message. However, UR is not within the transceiver. Heinrich et al, in view of Hanf (US Patent 5892893) do not teach the two voltage regulators within one integrated circuit. Hanf et al (US Patent 6438462) teach two voltage regulators (Fig 14; lines 15-45 of column 35) in one circuit. One ordinary skill would be motivated to include two regulators in one circuit for better control of operation.

Response to Arguments

Applicant's arguments filed on 10/1/2007 have been fully considered but they are moot in view of new ground of rejections.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fahmida Rahman whose telephone number is 571-272-8159. The examiner can normally be reached on Monday through Friday 8:30 - 5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fahmida Rahman
Examiner
Art Unit 2116



A. ELAMIN
PRIMARY EXAMINER